unmarried hysterical girl certainly gave evidence, by her movements, that she was quite aware of one of the duties of married life; and, moreover, in this case, the idea was still present when she was able to speak, for she addressed the administrator in terms far fonder than the occasion warranted; while another girl, who had behaved in a similar manner, said, 'I hope I have not said anything naughty.' Both of these cases brought forcibly to one's recollection, many trumped-up cases of felonious assault, and how extremely inadvisable it is to have recourse to anæsthesia without a third person being in the room.

"At a recent meeting of the Odontological Society, it was stated that the nitrous oxide had been administered in a few cases of pregnancy; but, delivery not having at that time taken place in any one of these cases, the condition of the fœtus *in utero* was unknown. A lady, one of the above cases, whom I put fully under the influence of the gas twice during the eighth month, has just been confined with a fine healthy boy; so that, in this case at least, the gas cannot have interfered with the nutrition of the child, for it weighed at birth eleven pounds and a half.

"When administered to a girl, aged nineteen, with cavities in the apices of both lungs, the patient was insensible at the end of forty-five seconds. The respiration suddenly became very shallow and panting, while, instead of the rosy hue which generally appears over the face and lips on the removal of the face-piece, the lips and face became more dusky before the red tint appeared; the pulse was not affected, but the respiration, for more than half an hour afterwards, was very shallow and hurried."

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10. *Mr. Higginbottom's Method of Using the Nitrate of Silver in Erysipelatous Inflammation.*—Mr. JOHN HIGGINBOTTOM complains that the correct directions either in regard to the strength of the solution of nitrate, or the proper method of applying it, is not given in the various medical and surgical works he has seen, and he therefore describes (*Practitioner*, January, 1869) the following as his method:—

"The affected part should be well washed with soap and water, then with water alone, to remove every particle of soap, as the soap would decompose the nitrate of silver; then to be wiped dry with a soft towel. *The concentrated solution of four scruples of the nitrate of silver to four drachms of distilled water is then to be applied two or three times on the inflamed surface and beyond it, on the healthy skin, to the extent of two or three inches.* The solution may be applied with a small piece of clean linen, attached to the end of a short stick; the linen to be renewed at every subsequent application. As the solution of nitrate of silver is colourless, it is necessary to pass a little linen, just moistened, over every part where it has been used, in order to be equally diffused, so that no part be left untouched.

"In about twelve hours it will be seen whether the solution has been well applied. If any inflamed part be unaffected, the solution must be immediately reapplied. Sometimes, even after the most decided application of the nitrate of silver, the inflammation may spread; but is then generally much less severe, and is eventually checked by repeated application. It is desirable to visit the patient every twelve hours, until the inflammation is subdued.

"By these means we have complete control over the disease.

"For the successful application of the nitrate of silver the ordinary brittle stick, either solid or in solution, must be used. Not the 'lunar caustic points perfectly tough,' nor the crystals and cake used for photographic purposes."

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11. *Convallarin and Convallamarin.*—Dr. MARMÉE, of Göttingen, describes two glucosides, under the above names, which are obtained from the Convallaria majalis. 1. *Convallarin*, although nearly insoluble in water, acts as a purge without apparent inconvenience, in three or four grain doses, and even in larger quantities seems not to gripe at all. 2. *Convallamarin* is bitter and soluble in water; it causes some vomiting even when given in small doses. In larger quantities it is an energetic heart-poison; injection of 15 to 20 milligrammes ($\frac{3}{20}$ to $\frac{6}{20}$ grain) into the venous system of dogs produces paralysis of the heart, nearly always accompanied by clonic convulsions. The heart is quite unirritable, even if examined immediately. The respiration lasts longer than the heart's

action. Somewhat smaller doses slow the heart without lowering the arterial pressure, which latter *rises* remarkably during the second stage of heart-*quickening*. This stage of rapid and irregular action passes over finally into cardiac paralysis. Convallamarin seems to rank, both in qualitative and quantitative activity, with hellebore, upas antiar, digitalis, nerium, oleander, etc. As regards its action on the heart, it also resembles aconite and veratria. Each of these glucosides forms a reddish-brown solution with concentrated sulphuric acid; addition of water changing its colour to violet. Concentrated hydrochloric acid dissolves each of them, forming a red solution between blood and wine tint. If the solutions are supersaturated with soda and filtered, the filtrates give the reaction of the glucose.—*The Practitioner*, Feb. 1869, from *Grævell's Notizen*, xi. 3.

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12. *Spontaneous Changes in the Strength of Solutions prepared for Subcutaneous Injection.*—Some important observations have been made on this subject by Dr. BOURDON, of Paris. Having met with several cases in which subcutaneous injection failed to produce the anticipated effects, he was led to believe that this was due to a spontaneous loss of strength in such solutions as had been kept for several months. This change could be accounted for in only two ways—either by a decomposition of the alkaloid by the growth in the solution of vegetable organisms, which assimilate to themselves certain of the elements of the alkaloid, or by the deposition on organic formations of a portion of the dissolved salts of the alkaloid; the vegetable filaments, in the latter case, serving the same purpose as threads in favouring crystallization. In one of Dr. Bourdon's experiments, a solution of sulphate of quinia and tartaric acid in distilled water lost, in ten months, 25 per cent. of its saline and acid ingredients; a minute portion of the latter being, however, deposited in the form of crystals on the filaments of an abundant growth of mycelium that appeared in the fluid. It is, therefore, legitimate to assume that solutions of vegetable alkaloids are decomposed, with necessary loss of strength, by the production in the first place of vegetable organisms, which feed as it were on the dissolved substances, and after these organisms have obtained a certain development, by the deposition on them of an additional portion of the dissolved alkaloid salts.—*Ed. Med. Journ.*, Dec. 1868, from *Bull. Gén. de Thérap.*, 30 April, 1868.

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13. *Charcoal Respirators.*—Dr. WM. MARCET extols (*British Medical Journal*, January 23, 1869) the use of charcoal respirators for sufferers from phthisis, from inflammatory affections of the lungs and air passages; and states they are a valuable means of protection of the lungs against the admission of impure and cold air, and the foreign particles of dust and mechanical impurities contained in it.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

14. *Observations on the Physiology and Pathology of Hemi-Chorea.*—Dr. J. HUGHLINGS-JACKSON states (*Edinburgh Medical Journal*, Oct. 1868,) that it has long seemed to him that embolism of parts in the region of the corpus striatum gives a most satisfactory explanation of the physiology and pathology of cases of chorea.

There are three chief divisions of this hypothesis, which he illustrates by cases of hemi-chorea, although of course what follows, *mutatis mutandis*, will apply to cases of bilateral chorea.

1. That, in chorea, nerve-tissue forming the convolutions near to the corpus striatum, is in parts diseased.
2. That the nerve-tissue there diseased is *not* destroyed, but is unstable.
3. That this local instability is frequently brought about by under-nutrition